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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/207,361	12/08/1998	FRIEDHELM ZUCKER	RCA-89.291	6681

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THOMSON LICENSING INC.
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EXAMINER

CHU, KIM KWOK

ART UNIT	PAPER NUMBER
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2627

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	01/05/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary**Application No.**

09/207,361

Applicant(s)

ZUCKER, FRIEDHELM

Examiner

Kim-Kwok CHU

Art Unit

2627

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on Amendment filed on 10/31/2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3 and 6-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3 and 6-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 March 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Response to Remarks

1. Applicant's Remarks filed on October 31, 2006 have been fully considered but it is not persuasive.

Applicant does not agree that the prior art of Takokoro's magnet 8 is both an initializing and erasing magnet (page 5 of the Remarks, lines 21 and 22). Accordingly, Takokoro teaches that the recording medium has a supplementary layer 4 which is provided to enable overwriting; that is to enable new data to be written over old data directly (column 1, lines 40-45). In addition, the prior art of Takokoro's initializing magnet 8 has an external field H_{ini} where the H_{ini} is greater than the coercive force H_{c2} of the recording layer 4 (columns 2 and 5, lines 20-25 and 34-38 respectively).

To erase information previously stored in the recording medium as in Applicant's amended feature in Claim 1, the prior art of Takokoro teaches that the second layer 4 is uniformly magnetized by the magnet 8 (column 5, lines 40-52). In other words, the stored information is erased/magnetized by the magnet 8's external field H_{ini} as in Applicant's amended Claim 1.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 102 that form the basis for the rejections under this section made in this Office action:

*A person shall be entitled to a patent unless --
(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.*

3. Claims 1-3 and 6-9 are rejected under 35 U.S.C. § 102(b) as being anticipated by Takokoro et al. (U.S. Patent 5,025,430).

Takokoro teaches a magneto-optical recording system having all of the elements and means as recited in claims 1-3 and 6-9. For example, Takokoro teaches the following:

(a) with respect to Claim 1, an information erasing means 8 (Fig. 3A; initializing magnet 8 aligns layer 4 in one single direction); in case of recording information, an information writing device 21 (Fig. 3A); the writing device (laser source in 21) is formed from a writing magnet 9 and an optical scanning device 21 (Figs. 3A and 3B); the writing device (laser source in 21) overwrites information or data recorded on a magneto-optical medium 1 (Fig. 3B; column 2, lines 34-68); the erasing means 8 is formed by an erasing magnet 8 having a magnetic field Hini which is directed opposite to the magnet 9 of the writing device (laser source in 21) (Fig. 3B; magnetic

field Hini initializes/erases layer 4 in the form of aligning data in the same direction but no to overwrite it); the information erasing means 8 is connected with the optical scanning device 21 to one of erase, and erase and initialize the magneto-optical recording medium (Fig. 3B; magnetic field Hini initializes/erases layer 4 in the form of aligning data in the same direction but no to overwrite it); the information erasing means 8 initialize the magneto-optical recording medium 1 only in a region upstream (disc rotating direction) of a track to be written directly before the recording of new information or data (Figs. 3A and 3B; erasing means 8 initialize a track before data is overwritten); the erasing means 8 has a field strength Hini sufficient to initialize the magneto-optical recording medium 1 and to erase information previously stored on the magneto-optical recording medium without the assistance of a laser (Fig. 3B; initialization and erasing recording layer 4 by magnetization does not require heat; column 2, lines 21-24; Hini > Hc2).

(b) with respect to Claim 2, the erasing magnet 8 has a mechanical connection to the writing device (Figs. 3A and 3B; inherent feature because the erasing magnet 8 and the writing device 21 are all supported by a mechanical connection, for example, a head assembly).

(c) with respect to Claim 3, a mechanical connection such

as a join to connect erasing means 8 and writing device (laser source in 21) (Fig. 3A; inherent feature because the means 21 and 8 are mechanically joined together within a head assembly).

(d) with respect to Claim 6, the erasing magnet 8 is a permanent magnet (Fig. 3A).

(e) with respect to Claim 7, the erasing magnet 8 is connected to a means (coils) for deactivating the erasing magnet 8 (Figs. 3A and 3B; magnetic field is activated or deactivated by current through a coil in electromagnet 8).

(f) with respect to Claim 8, the erasing magnet 8 is connected to a means for deactivating the erasing magnet 8 and the means for deactivating the erasing magnet 8 is an electromagnet (Figs. 3A and 3B; ; initializing magnet are electromagnetic means which generate erasing field when activated).

(g) with respect to Claim 9, the erasing magnet 8 is an electromagnet (Figs. 3A and 3B; ; initializing magnet are electromagnetic means which generate erasing field when activated).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. § 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Takokoro et al. (U.S. Patent 5,025,430) in view of Kamioka (U.S. Patent 5,493,548).

Takokoro teaches a magneto-optical recording and reproducing device very similar to that of the instant invention. For example, Takokoro teaches the following:

(a) with respect to Claim 10, an information erasing means 8 (Fig. 3A; initializing magnet 8 aligns layer 4 in one single direction); in case of recording information, an information writing device 21 (Fig. 3A); the writing device (laser source in 21) is formed from a writing magnet 9 and a first optical scanning device 21 (Figs. 3A and 3B); the writing device (laser source in 21) overwrites information or data recorded on a magneto-optical medium 1 (Fig. 3B; column 2, lines 34-68); an erasing magnet 8 having a magnetic field Hini which is directed opposite to the magnet 9 of the writing

device 21 (Fig. 3B; initialized magnetic field H_{ini} is opposite to the recording magnetic fields); the erasing magnet 8 having a field strength H_{ini} sufficient for initializing and erasing information previously stored on the magneto-optical medium (Fig. 3B; initialization and erasing recording layer 4 by magnetization does not require heat; column 2, lines 21-24; $H_{ini} > H_{c2}$); the first optical scanning devices 21 for recording (Figs. 3A and 3B); the information erasing means 8 is connected with the optical scanning device 21 to one of erase, and erase and initialize the magneto-optical recording medium (Fig. 3B; magnetic field H_{ini} initializes/erases layer 4 in the form of aligning data in the same direction but no to overwrite it); and the erasing means 8 initialize the magneto-optical recording medium 1 only in a region upstream (disc rotating direction) of a track to be written directly before the recording of new information or data (Figs. 3A and 3B; erasing means 8 initialize a track before data is overwritten).

However, Takokoro does not teach the following:

- (a) a second optical scanning device for reproducing data; and
- (b) the two optical scanning devices are for simultaneously recording and reproducing data.

Kamioka teaches a magneto-optical recording and reproducing device having two optical scanning devices for

simultaneously recording and reproducing data (Fig. 1; column 9, lines 3-20).

A plurality of scanning devices (read/write head) can be used to read and write information/data on an optical recording medium at the same time so that the read/write operations can be independent to each other. For example, Kamioka uses one read/write head for reading information while another head for writing data on an optical recording medium.

When a single read/write head such as Takokoro's would like to perform read and write information/data simultaneously on a magneto-optical recording medium, it would have been obvious to one of ordinary skill in the art at the time the invention was made to replace Takokoro's single read/write head with Kamioka's multiple optical scanning (read/write head) devices so that simultaneously recording and reproducing information/data on different tracks can be realized.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Miyatake et al. (6,018,505) is pertinent because Miyatake teaches an integrated erasing and initializing magnetic means.

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

8. Any inquiry concerning this communication or earlier communication from the examiner should be directed to Kim CHU whose telephone number is (571) 272-7585 between 9:30 am to 6:00 pm, Monday to Friday.

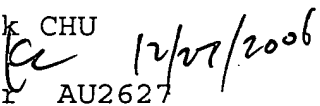
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrea Wellington, can be reached on (571) 272-4483.

The fax number for the organization where this application or proceeding is assigned is (571) 273-8300

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished application is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9191 (toll free).


TAN DINH
PRIMARY EXAMINER

11/03/07

Kim-Kwok CHU

Examiner AU2627
December 27, 2006
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